REMARKS

Summary Of The Office Action & Formalities

Status of Claims

Claims 1-10 are all the claims pending in the application. By this Amendment, Applicant is amending claims 1-8 and adding new claims 11-19. No new matter is added.

Claim to Foreign Priority

Applicant thanks the Examiner for acknowledging the claim to foreign priority and for confirming that the certified copy of the priority document was received.

Information Disclosure Statement

Applicant also thanks the Examiner for initialing the references listed on form PTO/SB/08 submitted with the Information Disclosure Statement filed on April 25, 2006.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 25.

Reference numeral 25 designates the stirrer and the specification has been amended accordingly. The omission of this reference numeral was an inadvertent error in the translation from original PCT application WO 2005/041772.

Claim Objections

Claims 1-10 are objected to for the reason set forth at pages 2-3 of the Office Action.

Applicant is amending the claims to address the objections.

Art Rejections

1. Claims 1-7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Deverre (US 7,131,958) in view of Seddon et al. (US 6,024,731).

2. Claim 8 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Deverre (US 7,131,958) in view of Seddon et al. (US 6,024,731) as applied to claim 7 and further in view of Darling, Jr. (US 6,213,986).

3. Claims 9 and 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Deverre (US 7,131,958) in view of Seddon et al. (US 6,024,731) as applied to claim 1 and further in view of Van Der Heiden et al. (US 5,879,318).

Applicant respectfully traverses.

Claim Rejections - 35 U.S.C. § 103

1. Claims 1-7 Over Deverre (US 7,131,958) In View Of Seddon et al. (US 6,024,731).

In rejecting claims 1-7 over Deverre (US 7,131,958) in view of Seddon et al. (US 6,024,731), the grounds of rejection state:

> With regard to claim 1, Figure 2 of Deverre teaches a placental-blood extraction device comprising at least one extraction needle (4 or 5) for piercing the vein of the umbilical cord (Col. 2 lines 16-17) or of the placenta, and a collection vessel (1) connected to said at least one needle via at least one tube (2). However, Deverre does not teach that the device is being characterized in that it further comprises suction means connected to said at least one needle and adapted to suck the placental blood so as to feed a said collection vessel, said suction means comprising a vacuum bottle of the Redon type that simultaneously forms a collection vessel. Seddon et al. teaches that the suction means (pre-charged vacuum that is inside the bottle, as disclosed in Col. 5 line 2) adapted to suck the blood or liquids from a wound so as to feed a collection vessel (1), said suction means comprising a vacuum bottle (1) of the Redon type that simultaneously forms a collection vessel. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify

Deverre with the suction means and vacuum bottle as taught by Seddon et al. for the purpose of increasing and maintaining the speed at which placental blood is collected. After the modification, the suction means will be connected to the at least one extraction needle and the entire device will be adapted for sucking placental blood.

With regard to claim 2, in the modification of claim 1, Seddon et al. also discloses that said suction means further comprises a vacuum pump (col. 1 line 14).

With regard to claim 3, in the modification of claim 1, both Deverre and Seddon et al. also teaches that the device includes at least one injection or extraction site (8 or 12 in Figure 2 of Deverre; the opening that connects 3 to 1 in Figure 1 of Seddon et al. because an opening in the bottle is where injection or extraction can be done) between said at least one extraction needle (4 or 5 in Deverre) and said collection vessel (1 in either Deverre or Seddon et al.).

With regard to claim 4, in the modification of claim 3, Figure 2 of Deverre also teaches that said at least one injection or extraction site (8) is provided on the tube (2).

With regard to claim 5, in the modification of claim 3, Seddon et al. also teaches that said at least one injection or extraction site (opening that connects 3 to 1) is provided on the collection vessel (1).

With regard to claim 6, in the modification of claim 3, Figure 2 of Deverre also teaches that said at least one injection or extraction site (12) is used to inject an anti-coagulant (Col. 3 lines 5-6 & 23-24) or to extract a sample of blood for analysis or to extract the blood contained in said collection vessel.

With regard to claim 7, in the modification of claim 1, Figure 2 of Deverre also teaches that said device includes blood-flow control means (13a or 14a) and Figure 1 of Seddon et al. teaches a suction control means (5 or 6).

Office Action at pages 3-4. Applicant respectfully disagrees.

The grounds of rejection correctly state that Deverre lacks any disclosure of the claimed suction means and vacuum bottle. However, the grounds of rejection rely on the disclosure of

Seddon et al. for this feature, but the alleged rationale for doing so is not rooted in any prior art disclosure and one skilled in the art would not have found it obvious to modify the structure of Deverre to include the vacuum of Seddon et al. in place of the gravity based apparatus. To the contrary, the two applications are completely different and the only rationale for making the modification would be based on Applicant's disclosure and not any reason known in the art at the time of the application. *See KSR v. Teleflex*, 127 S. Ct. 1727 (2007).

Indeed, in Deverre, there is no suction device, and only two collection practices are described, i.e. by using the mother's contractions during childbirth ([0023]) or by using gravity ([0024]). There is no indication that these methods are deficient or any hint in Deverre to use suction. Thus one skilled in the art would not have considered modifying the device of Deverre in view of Seddon et al.

Furthermore, Seddon et al. describes a vacuum bottle used in connection with a wound drainage system. The vacuum bottle is thus connected to a drainage tube and used to remove fluid and wound secretions from the site of a wound (see column 1, lines 10-13). Seddon et al. does not disclose or suggest that a vacuum bottle could be used together with one or more needles. In fact, vacuum bottles such as those disclosed in Seddon et al. were well-known ("conventional", see page 1, line 15), ***but only with wound drainage systems***.

The fact that such vacuum bottles have never been used to collect placental blood, or more generally in connection with needles, is an objective indication of inventiveness. Had it been obvious, then such use would have been made before.

The claimed devices provide distinct advantages not before appreciated. For example, they provide a placental-blood extraction device that can be used by a single person (unlike devices where syringes are used, and where two people must cooperate to use the device), and

which allows to collect quickly an important amount of blood to avoid coagulation. None of these problems are discussed in Seddon et al., and someone skilled in the art would thus not go to this document to find a solution to these problems.

In view of at least the foregoing, the Examiner is kindly requested to reconsider and withdraw the rejection of claim 1 and claims dependent therefrom.

New Claims

For additional claim coverage merited by the scope of the invention, Applicant is adding new claims 11-19.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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